

A<sup>3</sup> code, a vehicle model year, a vehicle site of manufacture, and optionally a vehicle manufacture date; and,

(c) identifying the refinish colorcoat composition in the database that matches the paint code, model year, manufacturing site, and optionally manufacturing date extracted from the vehicle, thereby revealing the refinish colorcoat composition that matches the color and color effect of the vehicle's original finish.

### R E M A R K S

Applicants have carefully reviewed the Office Action dated August 23, 2002, and respectfully request reconsideration in view of the following remarks. A separate petition and fee for the requisite three (3) month extension of time are provided herewith.

Claims 1-13 are pending.

#### **Formal Matters**

As a preliminary matter, Applicants have observed some formal matters that require correction in the claims. The preamble in each of main claims 1, 3 and 11 recite: "A method for determining a refinish colorcoat composition that matches the color and color effect of a vehicle's original refinish." However, they should recite: "A method for determining a refinish colorcoat composition that matches the color and color effect of a vehicle's *original finish*." This was a typographical error. Support for this change can be found throughout the specification and quick reference can be made to the abstract for support. Claim 11 has also been amended to correct the alphabetical order of the process steps. No new matter has been added. Entry of these amendments is respectfully requested.

#### **Claim Rejections - 35 U.S.C. 103 (a)**

Claims 1-13 stand rejected under 35 U.S.C. 103 (a) as being obvious over Carey et al (US 5,389,149) in view of David C. Wong (US 5,432,904). Reconsideration and withdrawal of this rejection are respectfully requested.

At the outset, Applicants acknowledge that this is a new ground of rejection. Applicants are pleased that the previous rejection based on Corrigan et al (US Pat. Appl. 2001/0041966) has therefore been withdrawn. Applicants, however, consider Corrigan et al to be closer art than any of the art now being

cited against the claims. For this reason and the reasons set forth below, the new grounds of rejection should likewise be withdrawn.

The present invention is directed to a method for matching the original paint color on a vehicle being repaired at a typical collision repair facility (oftentimes referred to as a body shop) and determining the best match refinish paint formulation (oftentimes referred to as collision repair paint) for the vehicle in question. When repairing a vehicle, for example, that has been damaged in a collision, it is difficult to match the color and effect (such as metallic effect) of the vehicle's original finish, and the present invention provides a method which finds the best color match a high percentage of the time.

Carey et al, on the other hand, are directed to painting a motor vehicle with an original colorcoat finish at a vehicle assembly plant during the vehicle's original manufacture. This is commonly referred to as an OEM (original equipment manufacture) paint application process, which is typically carried out on a continuously moving automotive assembly line. Carey et al are not directed to a method for retrieving a refinish or repair paint formulation that matches the vehicle's original finish, in order to repair a damaged area on the vehicle's original finish.

As Carey et al disclose, in the manufacture of trucks and vans, the assembly plants must be capable of painting such vehicles in a wide variety of original custom colors. The Carey process provides a method for rapid changeover of original colors, so that vehicles traveling on the assembly line can be painted with different colors in succession. The Carey system tracks each vehicle moving through the paint spray booth and provides the vehicle's location to a system controller which directs the assembly plant painter to the proper paint spray gun for the vehicle being painted.

Contrary to the examiner's suggestion, Carey consequently fails to teach searching a database for a matching refinish colorcoat paint formulation that matches the vehicle's original finish, since Carey et al's system searches only for an original colorcoat finish for the vehicle being painted during its manufacture. There is a fundamental difference between searching a database for the vehicle's original finish and searching for a collision repair or refinish paint formulation (from a long list of multiple possible alternate refinish formulations developed for each original color due to color drift at various assembly plants) that matches the vehicle's original color. Also, as correctly observed by the examiner, while Carey et al require a technician to input the

vehicle number and paint code in the paint system, a vehicle identification number (VIN) is not used to identify which original paint the vehicle will receive. Nor is there any suggestion in Carey et al to use the vehicle identification number to determine the best color match refinish paint formulation for a vehicle being repaired.

Turning to Wong, this reference teaches an auto repair estimator system which estimates the cost for repairing a vehicle that has been damaged in a collision. While this computer system includes means for inputting the vehicle identification number of a damaged vehicle into the system, it uses the VIN information, in a conventional manner, to perform a validity check on the damaged vehicle, i.e., to check to see if the vehicle in question is stolen. The system also uses the VIN information to display the proper parts list for the vehicle being repaired. There is no suggestion in Wong to use VIN information to track the color drift of an original color and use that information to find the best match refinish paint formulation for that vehicle.

In view of the forgoing remarks, neither Carey et al. alone or in combination with Wong teach or suggest the present invention. In view of the forgoing, reconsideration and withdrawal of the Section 103(a) rejection are respectfully submitted.

The Applicants have amended the claims to more clearly point out the invention and the patentable differences between Applicants' invention and the cited art have been set forth. The application should now be in allowable form. If for some reason the application is not allowable, Applicants' attorney request a telephonic interview with the Examiner to discuss the case and any additional amendments to the claims that may be required to place the case in allowable form.

Respectfully submitted,



STEVEN C. BENJAMIN  
ATTORNEY FOR APPLICANTS  
REGISTRATION NO. 36,087  
TELEPHONE: (302) 992-2236  
FACSIMILE: (302) 992-2533

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

In showing the changes, deleted material is shown as BRACKETS, and inserted material is shown UNDERLINE.

**IN THE CLAIMS:**

--1. (Amended) A method for determining a refinish colorcoat composition that matches the color and color effect of a vehicle's original **[refinish] finish**, which comprises in any workable order:

(a) gathering the VIN (vehicle identification number) and manufacturer's paint code from a vehicle needing refinishing;

(b) extracting from the VIN the model year and manufacturing site information for that vehicle;

(c) searching a database that contains the manufacturer's paint codes, refinish data assigned to each paint code that indicates the matching refinish colorcoat compositions created for that particular paint code, and VIN numbers assigned to each refinish colorcoat composition that indicates the model year and manufacturing site for which that particular refinish colorcoat composition was developed; and,

(d) identifying the refinish colorcoat composition in the database that matches the paint code, model year, and manufacturing site extracted from the vehicle, thereby revealing the refinish colorcoat composition that matches the color and color effect of the vehicle's original finish.--

--3. (Amended) A method for determining a refinish colorcoat composition that matches the color and color effect of a vehicle's original **[refinish] finish**, which comprises in any workable order:

(a) gathering the VIN (vehicle identification number), manufacturer's paint code, and manufacture date from a vehicle needing refinishing;

(b) extracting from the VIN the model year and manufacturing site information for that vehicle;

(c) searching a database that contains the manufacturer's paint codes, refinish data assigned to each paint code that indicates the matching

refinish colorcoat compositions created for that particular paint code, VIN numbers assigned to each refinish colorcoat composition that indicates the model year and manufacturing site for which that particular refinish colorcoat composition was developed, and manufacturing dates assigned to each refinish colorcoat composition that indicates the manufacture dates for which that particular refinish composition is applicable; and,

(d) identifying the refinish colorcoat composition in the database that matches the paint code, model year, manufacturing site, and manufacture date extracted from the vehicle, thereby revealing the refinish colorcoat composition that matches the color and color effect of the vehicle's original finish.--

--11. (Amended) A method for determining a refinish colorcoat composition that matches the color and color effect of a vehicle's original **[refinish] finish**, which comprises in any workable order:

(a) ascertaining the manufacturer's paint code, model year, site of manufacture, and optionally date of manufacture of a vehicle needing refinishing;

(b) searching a database of refinish colorcoat compositions wherein each refinish composition in the database has assigned thereto a manufacture's paint code, a vehicle model year, a vehicle site of manufacture, and optionally a vehicle manufacture date; and,

**[(d)](c)** identifying the refinish colorcoat composition in the database that matches the paint code, model year, manufacturing site, and optionally manufacturing date extracted from the vehicle, thereby revealing the refinish colorcoat composition that matches the color and color effect of the vehicle's original finish.--